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ABSTRACT

In every advanced society the problems of higher education are problems associated with growth. Growth poses a variety of problems for the education systems that experience it and for the societies that support them. These problems arise in every part of higher education--in its finance, in its government and administration; in its recruitment and selection of students; in its curriculum and forms of instruction; in its recruitment, training, and socialization of staff--growth has its impact on every form of activity and manifestation of higher education. This essay argues that the problems facing higher education can be understood better as different manifestations of a related cluster of problems, and that they arise out of the transition from one phase to another in a broad pattern of development of higher education, a transition from elite to mass higher education, and subsequently to universal access. Underlying this pattern of development are growth and expansion. (Author/MJM)

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Problems in the Transition from Elite to Mass Higher Education

by MARTIN TROW

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Problems in the Transition from Elite to Mass Higher Education

By MARTIN TROW

In every advanced society the problems of higher education are problems associated with growth. Growth poses a variety of problems for the educational systems that experience it and for the societies that support them. These problems arise in every part of higher education – in its finance; in its government and administration; in its recruitment and selection of students; in its curriculum and forms of instruction; in its recruitment, training, and socialization of staff; in the setting and maintenance of standards; in the forms of examinations and the nature of qualifications awarded; in student housing and job placement; in motivation and morale; in the relation of reseach to teaching; and in the relation of higher education to the secondary school system on one hand, and to adult education on the other – growth has its impact on every form of activity and manifestation of higher education.

In most of the writing on higher education in recent years, these problems are treated in isolation. Curriculum reform and finance and administration are commonly discussed by different people, with different methods and assumptions and often with different values; they are reported in different conferences and published in different journals for different audiences. Similarly, discussions of student unrest and disruptions in the universities more often make reference to student politics and ideology than to the changing relation of higher education to the occupational structures of advanced industrial societies. This essay will argue that these problems can be understood better as different manifestations of a related cluster of problems, and that they arise out of the transition from one phase to another in a broad pattern of development of higher education, a transition – under way in every advanced society – from elite to mass higher education and

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subsequently to universal access.[1] Underlying this pattern of development lies growth and expansion.

Aspects of Growth

The growth of higher education manifests itself in at least three quite different ways, and these in turn give rise to different sets of problems. There is first the *rate of growth:* in many countries of Western Europe the numbers of students in higher education doubled within five-year periods during the decade of the sixties and are doubling again in seven, eight, or ten years by the middle of the 1970s. Second, growth obviously affects the *absolute size* both of systems and individual institutions. And third, growth is reflected in changes in the *proportion of the relevant age grade* enrolled in institutions of higher education.

Each of these manifestations of growth carries its own peculiar problems in its train. For example a high growth rate places great strains on the existing structures of governance, of administration, and above all of socialization. When a very large proportion of all the members of an institution are new recruits, they threaten to overwhelm the processes whereby recruits to a more slowly growing system are inducted into its value system and learn its norms and forms. When a faculty or department grows from, say, 5 to 20 members within three or four years, and when the new staff are predominantly young men and women fresh from postgraduate study, then *they* largely define the norms of academic life in that faculty and its standards. And if the postgraduate student population also grows rapidly and there is loss of a close apprenticeship relationship between faculty members and students, then the student culture becomes the chief socializing force for new postgraduate students, with consequences for the intellectual and academic life of the institution that we have seen in America as well as in France, Italy, West Germany, and Japan. High growth rates increase the chances for academic innovation; they also weaken the forms and processes by which teachers and students are inducted into a community of scholars during periods of stability or slow growth.

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[1]This paper develops and extends ideas I first sketched out in two earlier essays, "Reflections on the Transition from Mass to Universal Higher Education," *Daedalus,* Winter, 1970, and "The Expansion and Transformation of Higher Education," *The International Review of Education,* February, 1972.

Absolute size has a variety of consequences for academic life. Growth may take the form of very large institutions, or of a very large system, or of both. When growth results in large institutions it has effects on the nature of the milieux in which teaching and learning and research go on. Large size affects the norms as well as the structures of higher education. For example, there is an academic norm, quite appropriate to the relatively small institutions of elite higher education, which prescribes that an academic man has an obligation to be of help with his time, advice, and so forth to anyone in any discipline in his own university, and to anyone in his own discipline anywhere in the world. During the last two decades in every advanced country in the world the numbers in almost every discipline have grown very substantially, while many institutions have doubled, tripled, or quadrupled their size. The norms of academic life have not significantly changed over this time. And that gives rise to what might be called a pattern of "institutionalized distraction." Academic men of middle and senior rank find that the number of requests for demands on their time and attention increase at least in proportion with the growth in the numbers of "relevant colleagues" and probably much faster, given the patterns of communication in scholarly life. The whole level of pace and activity increases: men are invited to consult on other people's projects, to go to increasing numbers of conferences, to referee more papers for more journals, and to carry the much more complex burdens of administration that are associated with large institutions and systems. It becomes increasingly difficult for academic men to protect the uninterrupted time that they need for fresh thinking about their subjects or for carrying on their scholarly work and research. This is a price paid for growth that is rarely taken into account by students of the costs and benefits of higher education. In response to increased demands on people's time academic men begin to devise patterns of evasion: men spend less time in their offices and more at home; they are more likely to take research leave away from their institutions; they rely more on their research institutes and centers. These centrifugal forces in turn tend to weaken the academic communities that have sustained the norms of academic life, with very marked consequences both for the governance of universities and for the training and socialization of students, undergraduate and graduate.

Growth affects the size of the national system as well as its component units, and here the effects are primarily economic and political. As a system grows it emerges from the obscurity of the relatively small elite system with its relatively modest demands on national resources, and becomes an increasingly substantial competitor for public expenditures along with housing, welfare, and defense. And as it does, higher education comes increasingly to the attention of larger numbers of people, both in government and in the general public, who have other, often quite legitimate, ideas about where public funds should be spent, and, if given to higher education, how they should be spent. The relation of higher education to the state becomes increasingly critical the bigger the system of higher education is; this is especially true in most European countries, where the state and local governments are almost the sole source of funds for higher education. Under these conditions the questions of academic freedom and institutional autonomy become central political questions, and not something to be arranged, as formerly, by a few old friends in the universities and in the ministries of education and finance who share very similar views of the world and who may well have been to the elite universities together. Growth raises the question of the relation of the state to higher education in new and disturbing ways.

Growth also manifests itself in the growing proportions of the age grade in any society enrolled in institutions of higher education. In many European countries, that proportion, just after World War II, was about 4 or 5 percent; it is now, only 25 years later, between 10 and 20 percent. A few countries exceed the upper figure. Growth in the proportions of the population that have access to higher education raises a number of questions central to the issue of mass higher education. For example, the proportions entering higher education in every country vary sharply in different regional groups, religious and ethnic groups, and socioeconomic classes. Everywhere the proportions from the upper and middle classes are significantly higher than from the working classes or farmers. When the proportions of an age grade going into higher education were very small, the political issue of equality of educational opportunity was centered much more on higher primary and secondary education. But the higher the

proportion of the age grade going on to higher education, the more the democratic and egalitarian concerns for equality of opportunity come to center on the increasingly important sector of tertiary education. These differences in access to higher education, which are not reduced but rather increased during the early stages of expansion, become a sharp political issue in the context of the democratic and egalitarian values that are increasingly strong in Western European countries, and these values create strong pressures for reducing these differences in group rates of enrollment. The more important access to higher education is for the life chances of large number of students, the stronger these pressures become. The persistent tendency of intellectually elite institutions such as the universities to be also the home of the social and economic elite, is a major source of tension between the institutions of higher education and the increasingly strong egalitarian values of Western society.

The rising rate of enrollment of an age grade has another important significance, one not so directly political. As more students from an age cohort go to college or university each year, the meaning of college attendance changes – first from being a privilege to being a right, and then, as is increasingly true in the United States, to being something close to an obligation. This shift in the meaning and significance of attendance in the tertiary sector has enormous consequences for student motivation, and thus also for the curriculum and for the intellectual climate of these institutions. I will return to this question later in this essay.

Phases in the Development of Higher Education

On the extent and speed of expansion of European highed education there is no question; indeed that story has been documented in great detail in recent OECD publications. For example, Sweden had 14,000 university students in 1947. By 1960 the number had more than doubled to 35,000; by 1965 it had doubled again to about 70,000 with another doubling by 1971, when university students comprised about 24 percent of the relevant age group. France saw a growth in its university population between 1960 and 1965 of from 200,000 to over 400,000, with another doubling projected by the mid-seventies, to an enrollment of about 17 percent of the age group. Denmark doubled its university student population between 1960 and 1966 from 19,000 to 34,000;

by the mid-seventies it will double again to 70,000, about 13 percent of the age group. In the United Kingdom the Robbins Report anticipated university enrollments growing from about 130,000 in 1962 to 220,000 by 1973 and to nearly 350,000 by 1980. These projections have already been substantially revised upward toward 400,000 (about 13 percent of the age group) in all forms of full-time higher education by 1973, and somewhere between 800,000 and 1,000,000 by 1981, with roughly half in universities.

What these numbers conceal are two fundamentally different processes. One of these is the expansion of the elite universities – the growth of traditional university functions in traditional, if somewhat modified, forms of universities. The other is the transformation of elite university systems into systems of mass higher education performing a great variety of new functions (at least new to universities) for a much larger proportion of the university age group. In Britain, as on the continent, growth, up to the present, has mainly been achieved by expanding the elite university system. But, I have argued, the old institutions cannot expand indefinitely; they are limited by their traditions, organizations, functions, and finance. In European countries, it is likely that an increased enrollment in higher education beyond about 15 percent of the age grade requires not merely the further expansion of the elite university systems, but the rapid development of mass higher education through the growth of popular nonelite institutions. Mass higher education differs from elite higher education not just quantitatively but qualitatively. They differ obviously in the proportions of the age grade that they enroll, but also in the ways in which students and teachers view attendance in university or college; in the functions of gaining entry for the student; in the functions of the system for the society; in the curriculum; in the typical student's career; in the degree of student homogeneity; in the character of academic standards; in the size of institutions; in the forms of instruction; in the relationships between students and faculty; in the nature of institutional boundaries; in the patterns of institutional administration and governance; and in the principles and procedures for selecting both students and staff. In other words, the differences between these phases are quite fundamental and go through every aspect of higher education. Let us look at each of these aspects of higher education in its several phases a little more closely.

Aspects of Transition

Size of the system – Countries that develop a system of elite higher education in modern times seem able to expand it without changing its character in fundamental ways until it is providing places for about 15 percent of the age grade. At that point or thereabouts the system begins to change its character; if the transition is made successfully the system is then able to develop institutions that can grow without being transformed until they reach about 50 percent of the age grade. Beyond that, and thus far only in the United States, large sections of the population are sending nearly all their sons and daughters to some kind of higher education, and the system must again create new forms of higher education as it begins to move rapidly toward universal access.

Attitudes toward acess – The ease of access to higher education is closely linked to conceptions that people – students and their parents, and increasingly college and university teachers and administrators – have of college and university attendance. When access is highly limited, it is generally seen as a privilege, either of birth or talent or both. Above about 15 percent of the age grade, people increasingly begin to see entry to higher education as a right for those who have certain formal qualifications. And when the proportion of the whole population comes to be about 50 percent, and in certain sectors of the society it is then of course much higher, attendance in higher education is increasingly seen as an obligation: for children from the middle and upper middle classes, in European countries as well as in the United States, failure to go on to higher education from secondary school is increasingly a mark of some defect of mind or character that has to be explained or justified or apologized for. Moreover, as more people go on to higher education, the best jobs and opportunities and the economic rewards in life come to be reserved for people who have completed a university degree, and this greatly contributes to the sense of obligation that is felt by many students on entry.

Functions of higher education – The different phases are also associated with different functions of higher education both for students and for society at large. Elite higher education is concerned primarily with shaping the mind and character of the ruling class, as it prepares students for broad elite roles in govern-

ment and the learned professions. In mass higher education, the institutions are still preparing elites, but a much broader range of elites that includes the leading strata of all the technical and economic organizations of the society. And the emphasis shifts from the shaping of character to the transmission of skills for more specific technical elite roles. In institutions marked by universal access there is concern for the first time with the preparation of large numbers for life in an advanced industrial society; they are training not primarily elites, either broad or narrow, but the whole population, and their chief concern is to maximize the adaptability of that population to a society whose chief characteristic is rapid social and technological change.

The curriculum and forms of instruction – The curriculum and forms of instruction naturally reflect changes in the definition of the meaning of being a student, and of the functions that higher education plays for students and for the society at large. The curriculum in elite institutions has tended to be highly structured, reflecting academic conceptions of the degree course or professional conceptions of professional requirements. The courses of study, shaped largely by the character of the final examination, were on the whole highly specialized, and governed by the professors' notions of what constituted an educated man or a qualified professional. In institutions of mass higher education, education becomes more modular, marked by semistructured sequences of courses, increasingly earning unit credits (the unit of exchange in modular courses) allowing more flexible combinations of courses and easier access and movement between major fields and indeed among institutions.[2] In universal higher education, as it emerges, there is a survival of the modular course, but increasingly instruction is relatively unstructured; the boundaries of the course itself begin to break down as do required sequences of courses. It is very difficult to justify course requirements where no single conception of higher education obtains, and the rejection of academic forms, structures, and standards also extends to examinations and assessment, as distinctions between learning and life become attenuated. Attendance at the emerging institutions of higher education designed for universal access is merely another kind

[2]Unit credits and a modular curriculum are much more common in higher technical colleges than in European universities.

of experience not qualitatively different from any other experiences in modern society which give one resources for coping with the problems of contemporary life. And, in universal access, since course work does not clearly qualify people for specific jobs it is less clear why assessment of performances is necessary.

There are parallel differences in the typical forms of instruction and thus in the relationships between student and teacher. In elite systems, the characteristic form of instruction is the tutorial or seminar, marked, on the whole, by a personal relationship between student and teacher.[3] This is compatible with the central function of the shaping of character and the preparation of a broad or general elite whose specific adult roles and activities would vary widely so that one could hardly train for them in the course of the university career. And the defense of these forms of instruction in the "higher schools" of France during the period of rapid expansion that filled the lecture rooms of the universities to overflowing made it clear where the elite functions in France are meant to survive. Under the conditions of mass higher education the emphasis is on the transmission of skill and knowledge, and increasingly formal instruction is carried on through large lectures supplemented by seminars often taught by teaching assistants. In "universal" higher education the direct personal relationship of the student and teacher is subordinated to a broad exposure of the student to new or more sophisticated perspectives. There is heavier reliance on correspondence, on use of video cassettes and TV's, and on computer and other technological aids to instruction.

The student "career"— The academic career of the student differs also. In elite institutions the student ordinarily enters directly after completion of secondary schooling; the student is "in residence" and continues his work uninterruptedly (except for holidays) until he gains a degree. He is in this sense "sponsored" and in competition only for academic honors. In the mass institution, students also, for the most part, attend immediately after finishing secondary school, although increasing numbers delay entry until after a period of work or travel. Easier access and a more heterogenous student population lead to higher "wastage

[3]While the distance between the *senior* professor and the ordinary undergraduate may be very great, his research students are likely to be working with him in a close apprentice relationship.

rates." But the students are now a mixed residential-commuting population as vocational training becomes a larger component of higher education. In institutions of universal access there is much postponement of entry, "stopping out" (i.e., periods when the student is not in attendance), and large numbers of students with experience in adult occupations. The emphasis on "lifelong learning" is compatible with the softening of the boundaries between formal education and other forms of life experience.

Moreover, as student numbers grow, with increasing numbers from poor homes, a growing proportion are also working for pay at nonacademic jobs – first during vacations and then during term time. This trend has implications for the meaning of being a student, for the curriculum (less outside reading and study can be assigned or assumed), for student motivations, and for the relationships of students with their teachers. And it is hard to discourage this practice, especially when it is done out of necessity by needy students. It can be ignored when it is the occasional "poor but able" student who has to work for his fees and maintenance. But it is a different institution when the proportion of working students is 30, 40, or 50 percent. The provision of state stipends for university students (as in Britain) is designed precisely to permit the maintenance of elite forms of higher education with a more "democratic" student intake. But the high and growing costs of stipends ironically acts as a brake on expansion: only one of the ways in which the principle of equality in higher education is at odds with expansion. The growing interest in student loans in several countries is a part of the effort to solve this dilemma in ways that will protect the university against part-time work by students. The "sandwich course" for technical and vocational students is another "solution" that makes a virtue of necessity by incorporating paid work into the regular curriculum.

Institutional diversity, characteristics, and boundaries – Systems at different phases of their development differ also in their diversity. Elite systems tend to be highly homogenous, the component institutions very much like one another. They tend to be universities with high and common standards, though they may include highly specialized "technical schools" with special access to parts of the Civil Service. Mass systems begin to be more "comprehensive," with more diverse standards, though with some linkages among the several segments of the system that allow

mobility of students and staff. In systems of universal access there is very great diversity in the character of component institutions, with no common standards among them. Indeed the very notion of standards is itself challenged and problematical.

The typical institutions in the three systems differ in size and character as well. Elite institutions are commonly "communities" that range up to two or three thousand students in residence. If larger than three thousand they are "substructured" so that their component units, such as the Oxford and Cambridge colleges, tend to be relatively small. The comprehensive institutions that characterize mass higher education are less "communities" than they are "cities of intellect" with up to thirty or forty thousand students and staff making up a mixed residential and commuting population. Institutions of universal access are unlimited in size; they may be simply aggregates of people enrolled for "instruction," most of whom are rarely or never on the central "campus"; they may share little in common and do not in any sense comprise a community rooted in frequent association, shared norms and values, and a sense of common identification.

As we might guess from the foregoing, elite institutions are marked off from the surrounding society very sharply by clear and relatively impermeable boundaries, in the extreme case by physical walls. In mass institutions there are still boundaries, but they are more fuzzy and more permeable; there is relatively easy movement in and out of mass institutions, and a much less clear concept of "membership," though there are still formal definitions of membership that are relevant for a variety of academic and nonacademic purposes. In institutions of universal access, boundaries are very weak, shading off to none at all. At some point anyone who may switch on a televised broadcast of a lecture may be thought of for that moment as being part of an "extended university," and the question of whether he is submitting work regularly or has "matriculated" is of only marginal significance.[4]

[4]It should not be thought that the Open University in England, despite its name, is a typical institution of universal access. On the contrary, it is a characteristically ingenious way of increasing access to an elite institution by substituting motivation for formal qualifications, and by allowing people to combine university work with full-time employment. Some of the characteristics of an elite university have been discarded, but the University maintains the high standards of elite British universities and its very clear boundaries. The Open University is an interesting transitional institution between the elite and mass phases of British higher education.

The locus of power and decision making – The three types of systems differ in their source of ultimate authority; in the nature of their academic standards; and in their principles of recruitment and selection. With respect both to ultimate power and effective decisions, elite institutions are dominated by relatively small elite groups: leaders in significant institutions – political, economic, and academic – who know one another, share basic values and assumptions, and make decisions through informal face-to-face contact. An example of this would be the small number of leading civil servants, government ministers, university vice-chancellors, and members of the University Grants Commission who shaped the face of the British university system for many years in small committee rooms or around tables at the Athenaeum Club. Mass higher education continues to be influenced by these elite groups, but is increasingly shaped by more "democratic" political processes and influenced by "attentive audiences." These are parts of the general public who have special interests and qualifications, and develop a common view about higher education in general or some special aspect, such as the forms and content of technical education. Higher education policies increasingly become subject to the ordinary political processes of interest groups and party programs. One kind of attentive audience is the employers of the products of mass higher education, who are interested in the nature of their skills and qualifications. Another attentive audience is the body of "old graduates" who retain an interest in the character and fortunes of their old university. These groups often develop political instrumentalities of their own, such as associations with an elected leadership, and develop lines of communication to the smaller groups in government, legislatures, and the universities themselves who make the actual decisions, both day to day and over the long range. When the system moves toward universal access, increasingly large portions of the population begin to be affected by it, either through their own past or present attendance, or that of some friend or relative. In addition the universities and colleges – what is taught there, and the activities of their staff and students – come to be of general interest, leave the pages of the serious press and magazines, and are reported in the popular journals and on television. They thus attract the interest of mass publics that increasingly come to see themselves as hav-

ing a legitimate interest in what goes on in the institutions of higher education, if for no other reason than their enormous cost and obvious impact on society. And these mass publics begin to make their sentiments known, either through letters to public officials or through their votes in special or general elections. The change in the size and character of the publics who have an interest in higher education and exert an influence on higher educational policy greatly influences the nature and content of the discussions about higher education, who takes part in them, and the decisions that flow out of them. The claims of academic men to a special expertise, and of their institutions to special privileges and immunities, are increasingly questioned; much of what academic men understand by academic freedom, and the significance of the security of academic tenure for the protection of their pursuit of truth regardless of political interests or popular sentiment, all are challenged by the growing intervention of popular sentiments into these formerly elite arenas.

Academic standards – The implications for academic standards are equally clear: in elite systems and institutions, at least in their meritocratic phase, these are likely to be broadly shared and relatively high. In the systems and institutions of mass higher education standards become variable, differing in severity and character in different parts of the system or institution, appropriately so since both system and institution have become holding companies for quite different kinds of academic enterprises. In institutions of universal access there tends to be a different criterion of achievement: not so much the achievement of some academic standard, as whether there has been any "value added" by virtue of the educational experience. That is the justification of universal higher education, as it is of the nonacademic forms of primary and secondary school; obviously this changes in a fundamental way the basis for judging individual or institutional activities. (For example, if the criterion of success is "value added," it may be better to admit students who are academically very weak, rather than those with a strong record, since presumably it will be easier to raise the performance of those who start low than of those who are already performing well. That argument is in fact made for the principle of "open access." Whatever substance it has, it does suggest how fundamental is the shift to "universal access.")

Access and selection – The principles of student selection also differ in the different phases. In elite systems the criterion of ascribed status gave way more or less rapidly over the past century to meritocratic achievement measured by secondary school performance or grades on special examinations. In institutions of mass higher education there is a general acceptance of meritocratic criteria where access is limited, but this is qualified by a commitment to equality of educational opportunity, leading to "compensatory programs" and the introduction of additional nonacademic criteria designed to reduce "inequities" in the opportunities for admission of deprived social groups and categories. In the institutions of universal higher education, which by definition are wholly "open" either to anyone who wishes to join or to those who have certain minimal educational qualifications, the criterion is whether an individual has *chosen* to associate himself with the institution voluntarily. The aim of universal access is toward the *equality of group achievement* rather than an *equality of individual opportunity,* and efforts are made to achieve a social, class, ethnic, and racial distribution in higher education reflecting that of the population at large. And of course the more nearly the system enrolls the whole of an age grade, the more closely it reflects the distribution of subgroups in the population at large. At the limiting case, of course, it is "democratic" in the same sense that compulsory forms of primary and secondary education are, with surviving variations in the character and quality of the education offered in different places and different kinds of institutions. We can already see hints of this philosophy of admissions and of these criteria for access even in the present transitional period between mass and elite higher education in European countries.

Forms of academic administration – The characteristic institutions in the three systems differ also in their forms of institutional administration. The typical elite university is governed by part-time academics who are essentially amateurs at administration. In some countries they may have the help of a full-time civil servant or registrar to deal with routine matters of financial problems. But the head of the administrative staff is commonly an academic elected or appointed to the office for a limited period of time. As institutions become larger and their functions more varied in the phase of mass higher education, their administrative

staff becomes larger; there is now more commonly a top leadership of men who were formerly academics but who now are clearly full-time university administrators. And below them there is a large and growing bureaucratic staff. As the system grows even further toward universal access the enormous costs generate pressures for greater financial accountability and more sophisticated forms of program management. Universities employ increasingly large numbers of full-time professionals, such as systems analysts and economists knowledgeable in program budgeting. The rationalization of university administration generates problems in that phase, since the functions of the institution itself have become increasingly more diverse, and its "outputs" more difficult to quantify, as the management procedures have become more dependent on quantified data for the assessment of costs and benefits.

The rationalization of university administration based on the systematic collection and analysis of quantitative data on the costs of discrete activities, and on measures of the "outputs" or "benefits" of these activities, is a response to the growth of the size and cost of higher education, and to growing demands for public accountability regarding its "efficiency." In their heavy reliance on quantified data, however, these managerial techniques become a powerful independent force working against the survival of elite institutions, functions, and activities that cannot be easily justified by reference to quantitative measures either of their "costs" or "benefits."[5]

But the development of mass higher education does not necessarily involve the destruction of elite institutions or parts of institutions, or their transformation into mass institutions. Indeed, elite forms of higher education continue to perform functions that cannot be performed as well by mass higher education – among them, the education, training, and socialization of very highly

[5]There is a certain danger in the argument that the development of these managerial techniques, as also of the increasing centralization of control, are "inevitable," given the growth in the size and cost of higher education. An emphasis on the "inevitability" of these trends and forces may preclude our asking the critical questions: how are these new techniques of administration being applied, what are their consequences, and what are the limits of centralization in relation to institutional autonomy? We should at least be aware of how these techniques may undermine those activities and functions of higher education that cannot be justified by reference to visible and easily measurable "outputs."

selected students for intellectual work at the highest standards of performance and creativity. And as we observe the system of mass higher education in the United States and the patterns of growth toward mass higher education elsewhere, we see that it involves the creation and extension of functions and activities and institutions rather than the disappearance of the old.

But while elite institutions and centers tend to survive and defend their unique characteristics in the face of the growth and transformation of the system around them, they are not always successful. Their special characteristics and integrity are threatened by those egalitarian values that define all differences as inequities; by the standardizing force of central governmental control; and by the powerful leveling influence of the new forms of rationalized management and administration. The rationalization of academic administration is a reflection and a product of the movement toward mass higher education; but it is not neutral toward other forms of higher education. In this respect it works against the diversity of the system that is also a characteristic – indeed, a central defining characteristic – of mass higher education. And this creates a dilemma to which I will return later in this paper.

Internal governance – The forms and processes of internal governance of institutions of higher education vary enormously, from country to country and between institutions. But on the whole, elite institutions everywhere tend to be governed by their senior professors;[6] those who do not hold chairs ordinarily play little or no part in major institutional decisions. As institutions, and especially their nonprofessorial staff, grow, the latter increasingly challenge the monopolistic power of what comes to be seen as a "professorial oligarchy." And in mass higher education, internal power comes to be shared to varying degrees with junior staff. Moreover, students increasingly claim a right to influence institutional decisions, and the forms and extent of student participation become a major issue during the transition from elite to mass higher education.

Problems of institutional governance are greatly sharpened by

[6]Oxford and Cambridge, with their "aristocratic egalitarianism" among the whole body of teachers (dons), are an exception to this general rule. See A. H. Halsey and Martin Trow, *The British Academics*, 1971, especially Chapter 6.

the breakdown of the academic concensus that occurs with growth and the transition from elite to mass higher education. Elite universities, with their narrow traditional range of functions and homogeneous bodies of students and teachers, could assume the broad acceptance by their participants of the basic character and values of the institution. But the movement toward mass higher education, with its wider range of functions, means the recruitment of new kinds of students and teachers, from more diverse backgrounds and with more varied views and conceptions of what higher education and their own institutions ought to be. At the same time, junior staff, whose interests and attitudes often differ sharply from those of the senior professors, are gaining in power and influence. And students, drawn from more diverse backgrounds and affected by radical political currents, challenge many of the traditional values and assumptions of the university. In many institutions, the old consensus on which elite universities were based has broken down, both within the faculty and among the students.[7] Relations among colleagues and between teachers and students no longer can be built on a broad set of shared assumptions, but are increasingly uncertain and a source of continual strain and conflict. The move toward participatory forms of governance often presupposes the survival of the old consensus, or the possibility of its re-creation. But if that is an illusion, as I believe, then participatory forms of democracy may introduce into the institutions of mass higher education the conflicts of interest and ideology that are more familiar (and more easily managed) in the political institutions of society.[8]

[7]The United States, as it moves toward universal access, is experiencing strains in the somewhat different kind of consensus on which its multiversities are based.

[8]This reference to student participation illustrates a general principle that emerges from this analysis: that the "same" phenomenon may have very different meaning and consequences in different phases of higher education. Thus "student participation" in the governance of a small elite institution, marked by high value consensus, may in fact be merely the participation of the most junior members of a corporate body. By contrast, "student participation" in a large mass institution marked by value dissensus may heighten the kind of interest and ideological conflicts that academic institutions, whatever their size or character, have great difficulty in containing or resolving. This is not always recognized; and the arguments for student participation drawn from experience in elite universities is often applied indiscriminately to mass institutions. (This is true of other aspects of governance and forms of administration as well.)

The politicization of the university is a familiar problem in almost all advanced societies, and the theme of much current literature. Its solution may be linked to the larger problem of devising structures that sustain educational diversity within an emerging system of mass higher education while allowing its component institutions and units to preserve their own unique identities, a narrower range of functions, and staff and students who share attitudes and values appropriate to their own institution. Consensus within units is wholly compatible with variety and diversity of forms and conceptions of higher education between units and within the larger system. But if the diversity of the whole system is reflected in each of its component units, the problems of institutional governance may become almost insoluble; and in that event, as we see in some countries already, effective power and decision making inevitably flow out of the colleges and universities into the hands of political authorities whose authority is based not on their roles in higher education but on the political processes of the larger society. The breakdown of institutional governance arising out of value dissensus and fiercely politicized conflicts of values and interests tends to weaken the autonomy of an institution: someone has to make decisions and account for public funds in ways broadly acceptable to the society at large; if this cannot be done inside the institution, then it will be done by outsiders or their appointees.

Caveats

There are several important caveats to be made before I develop this perspective further.

1. The three phases – elite, mass, and universal education – are, in Max Weber's sense, ideal types. They are abstracted from empirical reality, and emphasize the functional relationships among the several components of an institutional system common to all advanced industrial societies rather than the unique characteristics of any one. Therefore, the description of any phase cannot be taken as a full or adequate description of any single national system.

2. These ideal types are designed to define and illuminate the problems of higher education common to a number of countries. These problems are of three broad kinds:

(a) The functional relationships among the various components or aspects of given systems; for example, the degree of compatibility or strain between a given pattern of student admissions and the dominant forms of university curriculum.

(b) The problems arising during the transition from one phase to the next when existing, more or less functional, relationships are progressively disrupted by uneven and differently timed changes in the patterns and characteristics of the system. An example might be the survival of the professorial oligarchy as a mode of institutional, faculty, or departmental governance as the growth in the numbers and functions of junior staff increases their responsibilities, importance, and self-confidence.

(c) The problems arising in the relations between institutions of higher education and the larger society and its economic and political institutions, as higher education moves from one phase to another. An example here might be the greater concern for public "accountability" of funds spent on higher education, and the greater interference in the autonomy of higher educational institutions in the allocation and use of these funds, as costs rise and the higher educational system becomes more consequential and more significant to a wider range of social, political, and economic activities.

3. It must be emphasized that the movement of a system from elite to mass higher education or from mass to universal higher education, does *not* necessarily mean that the forms and patterns of the prior phase or phases disappear or are transformed. On the contrary, the evidence suggests that each phase survives in some institutions and in parts of others while the system as a whole evolves to carry the larger numbers of students and the broader more diverse functions of the next phase. Its newest, and gradually its most important, institutions have the characteristics of the next phase. So, in a mass system elite institutions may not only survive but flourish; and elite functions continue to be performed within mass institutions. (Similarly, both elite and mass institutions survive as the United States moves toward universal access

to higher education.) But this observation points to a characteristic problem of all mixed-phase systems: the problem arising from the strains inherent in the continuing existence of forms of higher education based on fundamentally different principles and oriented to quite different kinds of functions. The question follows: how successfully, through what institutions and mechanisms, does a system continue to perform elite functions when the emphasis of the system *has shifted to the forms and functions* of mass higher education? How successfully can a system perform diverse functions that require quite different structures, values, and relationships -- especially when central governing agencies are pressed, both by bureaucratic rules and egalitarian politics, to treat institutions and individuals equally and in standard ways?

4. The analysis of the phases of development of higher education should not be taken to imply that the elements and components of a system of higher education change at equal rates, and that a system moves evenly toward the characteristic forms of the next phase. In fact, development is very uneven: numerical expansion may produce a more diversified student body before the curriculum has been similarly diversified; the curriclum may become more diversified before the recruitment and training of staff has changed to meet the new requirements of the changed curriculum; the staff may have become more diverse before the forms of institutional governance reflect the changes in the character of university and college teachers, and begin to distribute institutional authority to reflect more closely academic responsibility. A close analysis of developments in any given system must attend (a) to the sequence of change of its several parts and patterns; (b) to the strains and problems arising therefrom; and (c) to the extent to which the changes in different countries show common sequential patterns among the various parts and elements of their systems.

In short, the analysis of the phases of higher education in advanced industrial societies, of the developments of parts of the system during these phases, and of the problems that arise at the transition points between phases and among elements changing at different rates within a phase, are designed to illuminate problems and patterns common to different societies and systems.

Variations in the Patterns of Change

There are several questions we may ask about the patterns of change in the course of the growth and transformation of higher education in advanced industrial societies.

1. Is there a characteristic pattern in the sequence of change of systems of higher education? If there is, what is that pattern?

2. Which elements of higher education change more or less easily and which are highly resistant to change in the course of growth?

3. What are the consequences of variations in the rate of change among the several elements of a system of higher education?

I cannot do any more here than suggest tentative and provisional answers to these questions.

The expansion of student numbers seems to precede other institutional change in almost all cases. Systems of higher education do not characteristically modify their arrangements in anticipation of growth. (Indeed the rate and amount of expansion, at least in the earlier phases of growth spurts, is commonly underestimated.) The one major exception to this was the "land-grant" state universities in America after the Civil War. These institutions, already democratic and comprehensive in conception, and devoted to scholarship, vocational studies, and public service equally, were far ahead of their time; they were, in fact, institutions dedicated to mass higher education long before college and university enrollments reached anything like the proportions that characterize mass higher education. This important development, arising out of egalitarian values of the United States and the role of education in its political philosophy, greatly eased the transition from elite to mass higher education in that country. Thus it is only experiencing now, in its move toward universal higher education, the problems that European countries are experiencing in their move from elite to mass higher education.

The growth of numbers, in itself, begins to change the conception that students have of their attendance in college or university. When enrollment rates are 4 or 5 percent of the age grade, students naturally see themselves as part of a highly privileged minority; although this does not mean that they are necessarily passive or deferential, it does make them feel, along with their

professors and lecturers, part of a small privileged institution with a very clear set of common interests embodied in common values, symbols and ceremonies, modes of speech, and lifestyle. All that affirmed the communal identity of the academic institution over against the rest of society. Students might indeed be highly rebellious, but their actions and demonstrations were typically directed against state or political institutions rather than against members of their own institution.

Growth toward 15 or 20 percent of the age grade, and, in the larger European countries, toward student numbers of half a million rather than fifty thousand, inevitably changed that. Students have come to see their entry into a university as a right earned by fulfilling certain requirements. And for some, an increasing proportion, attendance is in part obligatory: larger numbers in all countries attend university at least partly because people in their parents' social strata send their children to university "as a matter of course." Such students feel less like members of a chosen elite on arrival, and they enter universities that are larger (and in some cases very much larger) than their counterparts of 20 years ago. These big institutions are marked in many cases by impersonality, turbulence, and continuing political activity. There is little question that the "communal" aspects of universities have declined along with the sense on the part of the students and teachers of their being members of a special "estate."

The growth of numbers and the shift in the conception of attendance from privilege to right is accompanied by changes in the principles and processes of selection. As the gates gradually open, the older almost exclusive links between a handful of elite preparatory schools (whether private or state supported) and the universities become attenuated, and new avenues of access to higher education begin to open up. Logically, if the move toward mass education were state policy and carefully planned, the development of a broad system of "comprehensive" secondary schools, carrying larger and larger numbers from every social strata to the point of university entry, would *precede* the growth of mass higher education itself. In practice, however, the explosive expansion of higher education over the past two decades has almost everywhere *preceded* the move toward comprehensive secondary education. (The exceptions here again are the United States,

where universal comprehensive education had been achieved by World War II when enrollments in higher education were only about 15 percent, and Sweden, where the establishment of a fully comprehensive secondary school system and the rapid move toward mass higher education have proceeded by plan together over the past decade.) It is more true to say that mass higher education is forcing the growth of a popular system of comprehensive secondary education, rather than that the creation of the latter has made possible the expansion of higher education. (It is true, however, that the continued growth of higher education beyond, perhaps, 15 percent of the age grade, will depend on the continued democratization of the secondary school system and the transformation of more and more terminal secondary schools into schools that qualify students for university entry.)

But the change in the principles underlying the preparation and selection of university entrants has itself proceeded through a series of phases:

1. First there was the simple principle of admitting those "qualified" for entry according to more or less strict meritocratic principles. This process, however, rested heavily on very marked social inequalities in the opportunities to gain those qualification – opportunities almost exclusively offered by a small set of elite academic preparatory schools. The demand for the abolition of inequality was in the first instance met solely by an emphasis on meritocratic procedures and criteria, without much regard for the role of social inequality in affecting the chances of meeting those criteria. Qualifications took such forms as Britain's passes in its "A" level examinations or, in other countries, the successful completion of the preparatory secondary school program and the earning of a "Bac" or "abitur."

2. The set of complementary forces – increasing democratic pressures, needs of the economy, and the growth of higher education itself – lead to an expansion of those secondary schools and streams that qualify for university entry. This phase is marked by a growing concern for an increase in educational opportunities that would enable "able" students from lower social strata to enter university. However, during this phase, the growth in student members at university was very largely made up of an increase in the proportion of middle-class students, who almost every-

where are the first to take advantage of increases in educational opportunities of every kind and at every level.

3. In the third phase, partly as a result of the work of sociologists and partly under political pressures, there emerges a clear and more widespread recognition of the effect of social inequalities on educational achievement. And this in turn leads to special efforts to reduce the effects of those social inequalities. These take the form of proposals to modify the structure of secondary education, especially toward the comprehensive principle, or at least the extension of the educational channels through which access to higher education may be gained. In addition, there is a call for efforts to compensate for the disadvantaging effects of lower-class origins. Increasingly, schools and streams that formerly led to vocational schools or simply to early termination of formal education are modified to allow for university entry for at least some of their students, at least in principle.

4. In the fourth stage (and in part because social inequalities show everywhere a stubbornly persistent effect on educational achievement, despite the best efforts of reformers), the egalitarians attack the selective principle of higher education in principle, and demand "open access" to the universities (as at Vincennes) or a greater expansion of nonuniversity institutions of higher education that do not require the same formal academic qualifications for entry as do the universities. This phase (clearly visible in the United States though less so in European countries) marks a very significant shift from the principle of equality of opportunity for educational achievement, to more radical principles of equality of educational achievement for all definable social groups and strata. The principle of equality of individual opportunity is compatible with the maintenance of meritocratic criteria for entry: the effort is to enable more students from lower social strata to meet those qualifications. The latter principle, the equality of group achievement, affirms that social justice requires that students from all social strata be equally represented among all elite groups in society, and this, at least in the short run, is incompatible with the maintenance of most meritocratic criteria for admission. Needless to say, even where put into practice, the principle of equality of group achievement is usually introduced in a highly qualified or compromised way, and immediately introduces very substantial

problems, among them the relation of students in "open" institutions to those in institutions still governed by meritocratic principles, and also the significance of the qualifications earned in institutions where meritocratic criteria have been subordinated to other values (at Vincennes, for example, the French government simply ceased to recognize its diplomas).

The question of the principles and processes of selection and admission to higher education is the crucial point where higher education touches most closely on the social structure. What expansion does initially is to increase the opportunities for the children of the middle classes to gain an education that *still* promises to provide (though to a larger number of people) the dignified and rewarding professional occupations and traditional social status formerly reserved for a much smaller elite. While a detached observer might suggest that tripling or quadrupling the number of university graduates must reduce the special status and privileges accorded to the "graduate," it does not appear so at the time to participants in the process – for example, to the parents of the would-be university entrant. And resistance to expansion – say from 5 to 15 percent of the age grade – has almost everywhere been remarkably weak in the face of democratic values and presumed economic needs. But already the "overproduction" of university graduates for the traditional graduate occupations is causing misgivings among conservatives, who are beginning to see more and more clearly that mass higher education is a corrosive solvent of traditional social relations, status, hierarchies, and privileged access to elite careers. As a larger number of working-class youth begin to enter university, the impact of university expansion on the life chances of upper middle-class youth will become even more visible and threatening. It is hard to imagine a successful move to end the expansion of higher education, although that is certainly talked about in conservative circles in all Western countries. But the establishment of different sectors of higher education, reflecting the status hierarchies in the larger society, is a more effective way of using higher education to buttress rather than undermine the class structure. It would be useful to examine and compare the history and development of modes of access to higher education in different advanced industrial societies, to see just how they have

moved through the phases I have sketched, and where they are now.

I have suggested that after expansion itself, the earliest and most rapid changes in the system occur in the meaning of university student status, and in the principles of admission. But other components of the system are more resistant and slower to change. And that is because while the decision to expand, the definition of attendance, and the rules for admission are governed largely by forces *outside* the university, the curriculum, the forms of administration and internal governance, the structure of the academic career, modes of instruction, and academic "standards" themselves, are all largely shaped (though again with exceptions) more *within* the academy than by outside forces. And these internal processes are, for better or worse, highly conservative. This is in part because of how universities are governed, in part because of the characteristics and orientations of academic men. Let us look briefly at the latter.

Academic Orientations

How do academic men – the rectors and professors and associate professors, the docents and lecturers, who staff the old and the new institutions of higher education in every advanced society – view the rapid developments occurring all around them? We do not have a detailed study of the academic professions in most countries that would allow us to say with precision just how these men and women view their own institutions, students, and subjects, and the great changes under way or just over the horizon. But if we cannot know the distribution of academic attitudes – the relative size and strength of the several most important positions that university teachers take toward growth and change in their institutions – we can identify the major dimensions along which those attitudes divide.

The great changes in recent decades in the size and functions of higher education have generated a diversity of orientations within the academic profession in every advanced society. Until after World War II, the small university system in most countries was staffed by professors and their assistants, men who had made or were making their careers through a life of scholarship or scientific research. The bulk of their students went into a small number of professions traditionally linked to the university degree:

into higher secondary-school teaching, the civil service, into law, medicine, and the church, and in some countries into certain sectors of finance and industry. A small number of students stayed on for higher degrees as apprentices to the professors in their fields. The expansion and diversification, and partial democratization, of higher education over the past two decades has created different functions for higher education, and in so doing has brought different kinds of students to the universities. And, as I have suggested earlier, within the university the old concensus about the nature and proper functions of the university has broken down; in every country academic men differ among themselves in their attitudes toward changes in the university that are already under way or are likely to accompany further growth.

At first glance, it may seem that the major division among academic men is between those who give their approval and support to the transformation of their institutions and systems as they move from elite to mass higher education, with all the implications for selection, curriculum, etc., that we've discussed earlier, as opposed to those who tenaciously defend the forms and functions of elite higher education. But in fact many academic men (like politicians, civil servants, and ordinary people) do not draw the full implications of growth nor see its logical consequences, and many support the continued expansion of higher education while opposing its transformation into mass higher education. Others are wary of growth, while accepting and even supporting important changes in the character of their institutions. Thus we see that support among academics for substantial expansion, beyond 15 to 20 percent of the age grade in higher education, is to some degree independent of their attitudes toward the fundamental changes in governance, curriculum, and the like, that we associate with the movement toward mass higher education.

I am suggesting that a useful analysis of the variations in perspective and orientation among university teachers has to combine their attitudes toward the expansion of higher education with their views about its proper character and functions. Basic differences in academic orientations are best represented not along a single "traditionalist-expansionist" continuum, but more accurately by a typology, one dimension of which is defined by

their opposition to or support for continued rapid expansion; the other by a commitment to traditional university forms and functions versus an acceptance of the transformation of the basic functions and characteristics of the system as it moves from being an elite to being a mass system. This typology is shown graphically in Figure 1.

FIGURE 1

Attitudes regarding the proper forms and functions of higher education	*Attitudes toward the growth of higher education*	
	ELITISTS	EXPANIONISTS
Traditionalists	I	II
Reformers	III	IV

These stark polarities, of course, do not do justice to the complex views and attitudes held by individual university teachers. Nor do they capture the nuances of thought and feeling by which men manage to maintain conceptions of the universities and of their academic roles that reflect both expansionist and elitist values, or that accept some changes but not others in the character of their institutions. Nevertheless, men do differ in the emphasis they place on these values, the priorities they put on their embodiment in university organizations, and in the allocation of both national and personal resources. And it is the *relative* emphasis in their values and orientations that is crucial during a period of expansion and change, when men can oppose, or attempt to delay, or welcome, or even try to accelerate the changes that are associated with the expansion and democratization of higher education.

1. Traditionalist-Elitist

This complex of values and attitudes was the dominant orientation of European academic men (and indeed, of nearly everyone who had views about universities) before World War II. And they are still held by many university teachers, especially the senior professors, in many countries. In their purest forms they rarely are articulated or defended any longer in speech or print, but their power lies in the extent to which they continue to guide action. They are reflected most clearly in the work of senior academic

men in their senates and committees, defending deeply held and cherished values that for some represent the very essence of the university, values that give meaning and substance to civilized society. In this view, the function of higher education is to prepare small numbers of very able and ambitious students who have been rigorously educated in highly selective elite secondary schools – lycées or gymnasiums – for the professions traditionally requiring a university degree, and to prepare an even smaller number for a life of scholarship and scientific research. This university is defined by its traditional curriculum, and governed as an autonomous corporate body by senior professors. Graduates of the university, whether they remain there as scholars or go into the world in the learned professions, should hold a distinctive status in society, and indeed comprise a special estate, marked by a way of life and thought as well as by the dignities and privileges of their status. This conception of the university has its roots in the classical and humane studies of the medieval and post-medieval universities, as modified and extended by the inclusion of natural science in departments and research institutes during the 19th century. But this orientation is compatible wih the "democratic" view that entry to the university should be governed by strictly meritocratic criteria rather than by social origins, and thus in principle should be open to students from every social stratum, though in practice the nature of selection and preparation for entry effectively restricts membership almost wholly to the children of the professional and upper-middle classes.

In an egalitarian age, men who hold these views are often attacked as reactionary defenders of their own special privileges. But in their own minds they are defending an important bulwark of civilization against the new barbarism of mass society as they defend the values of scholarship, learning, and disinterested inquiry against the enormous pressures to subordinate the university to the needs of vocational training, economic growth, social leveling, and contemporary politics. It is an important question for societies and educators whether these views and these men will merely be defeated and "swept into the dustbin of history," or whether their views will inform and fructify the developments now occurring, and will survive in at least certain segments of the diverse systems of higher education now emerging. The fate of

those values will be determined in part by the unique social and political histories of the several societies whose educational systems are now undergoing change, and in part by the ways in which these changes are accomplished. It may be that the central questions for educators in the near future will be not how to dislodge elitist traditionalists from their positions of power in academic senates, institutes, and departments, but how to preserve and defend the best of the values that they represent under conditions of mass higher education.

2. *Traditionalist-Expansionist*

Academic men holding this position have welcomed or at least accepted the rapid growth of their institutions and systems, while defending the traditional university values discussed above. In a word, these are men who have believed it possible to expand very considerably the elite university systems without transforming them in fundamental ways or adding to them quite different kinds of institutions – it is a belief in the expansion rather than the transformation of higher education. These views are perhaps the most widely held of the four basic orientations we are describing. Everywhere the pressures for expansion that followed World War II met with surprisingly little resistance among academics, in part because they recognized the changed economic and social circumstances of the postwar world, in part because, in the short run, expansion greatly increased their resources and their capacities to do many things they had wanted to do, and in part because their institutions showed a surprising capacity to carry larger numbers of students and employ more staff without a fundamental change in their character. But as I suggest elsewhere, growth alone begins to create strains in the traditional forms and functions of higher education, and this orientation, inherently unstable, has no answers to the solution of the problems engendered by growth, except more growth or the cessation of growth.

3. *Elitist Reformers*

This is a small but significant body of academic men who wish to preserve the unique role of universities as elite centers for scholarship and research at its highest level, but who recognize the need for certain internal reforms that would reflect the changed map of learning and the changing relationships between higher

education and the larger society. Among the reforms these men have urged have been a modification of the professorial oligarchy that has governed most European universities and an improvement in the status of junior staff – in their conditions of work, their tenure, and their role in departmental and university government. In addition such men have also pressed for more support for research and a movement away from the traditional faculty toward a departmental organization that more closely reflected the actual organization of intellectual and scientific work; in this they were undoubtedly influenced by the American model in which the department is the arm of the discipline in the university. In a sense, this perspective aimed to modernize the university in its organizational structure without changing its basic character as the center for intellectual work at the highest standards, access to which is limited by meritocratic criteria to a relatively small number of able and highly motivated students. Many of these men have learned in the past few decades how much easier it is simply to increase the numbers of students and staff than to carry out the serious structural reforms that they have recommended. But in their view, a slowing down or even a cessation in the rate of growth of higher education or the shifting of growth wholly to the nonuniversity sectors may provide the breathing space and opportunity to reform the conditions of teaching and learning in the universities, and thus afford an opportunity for reestablishing and reinforcing those high standards threatened by the indiscriminate growth of unreformed structures.

4. Expansionist Reformers

Expansionist reformers, concentrated very much on the political left, and among younger faculty in the social sciences and some of the arts subjects, see many of the traditional forms and functions of the university as the greatest obstacle to the democratization and expansion of higher education. The problem appears to many of them as much political as educational: to change the distribution of power within universities so as to break the capacity for resistance of the more conservative professorial elite. In this they often have the cooperation of political parties and movements, and sometimes of higher civil servants in the relevant ministries of education. The views of this body of thought are marked by a conviction that there must be a substantial trans-

formation of higher education; it must be extended vertically in the class structure – fundamentally democratized in its patterns of recruitment – and also horizontally into a broad range of social, economic, and political activities of the society. For example, they want to provide useful training for a much wider range of occupations and professions than the traditional learned professions of the old university. Also, it is not uncommon for people with these views to link the transformation of the university to broader ideas of social transformation or revolution. Moreover, the proponents of this position do not ordinarily recommend the creation of institutions to carry these additional functions alongside the elite universities, but rather urge the transformation of those elite universities into larger, more heterogeneous, more democratic and socially responsive institutions of mass higher education. And in many countries young faculty have found support for their views in the student body; the main weight of student demands for changes in the university fall into this category.

The attitudes and orientations of university teachers and administrators toward the future of higher education in their countries, summarized in this typology, both reflect and influence its growth and development. The rapid growth of higher education after World War II brought large numbers of new men into the system. In the climate of Europe after World War II many of these did not accept the old assumptions of European elite education, especially its narrow class base for recruitment and the "undemocratic" rule of the professiorate.

In addition, rapid growth, both in rate and absolute numbers, weakened the close personal ties of junior and senior men that had softened and legitimated the traditional arrangements. The powerlessness and insecurity of the junior staff has become more visible and more resented.

The broad-based demand for expansion set off a train of consequences, most of which undermined the old assumptions and arrangements and led to calls for further democratization and reform. For example, higher education during the 1950s and 1960s was increasingly justified by reference to its presumed contribution to economic growth, and there was a strong emphasis on the links between university training and industrial development. At the same time that tendency created pressures for an expansion of

technological and business studies and for more directly applied research in the universities. On the other hand, the growing welfare state created a continuing demand for people with skills in the applied social sciences – in public administration, in social work, in penology – indeed for the whole range of social problems to which the state was giving increased and systematic attention. Both of these broad developments strengthened certain sections of the university and imbued them with a spirit inevitably at variance with that of the traditional elite university. Many of the problems of European higher education have centered on the accommodation of these new functions and activities, and the new kinds of people drawn to them and thus into the university, with the older functions and traditional conceptions of university life.

The typology of academic orientations sketched above, although not meant to be descriptive of the full range of views held by individual teachers and administrators, is designed to be helpful in addressing such questions as these:

- How diverse *are* the conceptions of academic life; are they captured in this kind of typology, or are there better ways of describing the main currents of thought among academic men about their own institutions? And do we find the same types of attitudes among politicians and civil servants – or are differences among them along different lines of cleavage?
- What is the distribution of these types within a university, or a national system, and how has that distribution been changing over time?
- What is the organizational structure of this normative diversity? Do we find representatives of all of these types within every faculty, every department, in ways that are making it increasingly difficult to govern these units and carry on the ordinary business of education? Or do we find a continued consensus on the conceptions of education within faculties and departments, with the dissensus reflecting the new departments and faculties and research institutes within the expanded universities – and thus somewhat insulated from one another in the ordinary running of the institution?
- Where are the concentrations of views held in terms of subject areas, age, kind of institution, and the like? New "experimental" institutions tend to recruit men interested in reform and expan-

sion initially. Do the new institutions have much higher concentrations of "expansionist reformers" or do they increasingly become "more royalist than the king," with strongly conservative positions as a result of the insecurity of their status within their national systems of higher education?

- What are the patterns of coalition and conflict within the universities? On what kinds of issues do men and groups holding one or another of these different views join with others on such issues as curriculum reform, and to what extent are lines of conflict and cleavage drawn along these lines of academic orientations?

Briefly, we are asking whether this typology of academic orientations helps to illuminate and clarify the dynamics of conflict and change in the systems and institutions of higher education now, and whether it aids us to study and understand the evolution of these systems in the future? At the very least, if this typology shows a certain congruence with the realities of institutional life, it suggests that we need solid empirical data on the distributions of these views in different systems and parts of systems. Broad comparative survey research centering on a typology something like this may allow us to get a better sense of the role of academic attitudes and values in institutional change in European higher education. For, whatever may be the best way to discuss and analyze them, the distribution of attitudes and orientations of university teachers and administrators about their own institutions is a major force in determining whether a society moves toward mass higher education, how it deals with the strains that inevitably arise as it grows before it transforms its institutions, what forms the new mass institutions take, and whether the older functions and institutions survive and continue to perform their traditional university functions.

Dilemmas of Growth in the Transition Toward Mass Higher Education

The expansion of higher education and the transition of elite to mass systems generate a set of dilemmas that are not easily solved, but that persist as continuing problems for teachers, students, and administrators. The forms these dilemmas take and their relative importance vary from country to country, but in some form they are visible in every advanced society whose systems of higher education are growing.

Quality, Equality and Expansion

The steady expansion of higher education appears to some observers to constitute a serious threat to academic standards. The question of "standards" is nominally a question of the quality of an academic program, how rigorous and demanding on the one hand, how rich and stimulating on the other. At one extreme we think of a group of learned and imaginative scholars teaching highly selected and motivated students in a situation of rich intellectual resources, cultural, scientific and academic. At the other extreme are institutions staffed by less well-educated and less-accomplished teachers, teaching less-able and less well-motivated students under less favorable conditions – marked by lower salaries, a poorer staff-student ratio, a smaller library, fewer laboratory places, and all in a less stimulating and lively intellectual environment. Many countries are committed to the expansion of their systems of higher education, but to an expansion which does not lower the quality and standards of the higher education already offered. This involves the achievement of education at a high and common standard of quality throughout the system, whatever the varied functions of the different institutions may be. And this dual commitment – to continued growth and also to high quality in all parts of the system – poses the dilemma.

The dilemma has three components. First, there is the strong egalitarian sentiment that all provision in higher education ought to be substantially of equal quality (and thus of cost). (In the absence of good or reliable measures of the effects of higher education on the adult careers of graduates, we tend to assess the "quality" of education by reference to its internal processes, and this leads us to equate quality with cost.) The second is that the criteria against which new forms of mass higher education are assessed are typically those of the older, costlier forms of elite higher education. And third, a rapid and potentially almost unlimited growth of higher education, at the per capita cost levels of the former small elite systems, places intolerable burdens on national and state budgets that are also having to cope with growing demands from other public agencies, such as social welfare, preschool education and child care, primary and secondary school systems, housing, transportation, and defense.

When applied to higher education, the egalitarian position, which cuts across class lines and party preferences, is highly critical of any tendency to institutionalize differences between one sector and another of higher education. Egalitarians in many countries are committed to closing the gulf between the several parts of their higher educational systems, and to reducing the differentials in the status, quality, costs and amenities of its different segments and institutions. Men with these sentiments, who might be called "unitarians" in their commitment to a single system of institutions, governed by common standards of education throughout, are often also committed to reforming universities and making them serve more of the functions of the nonelite forms of higher education, while at the same time raising the quality of the nonelite forms of higher education, especially of higher technical education, to that of the university standard. (These are the people I have described earlier as "expansionist reformers.") This position, liberal, humane, and generous, argues that the formal differentiations between the different forms and sectors of higher education almost always lead to invidious distinctions between them, and ultimately to very marked differences in the quality of their staff and students, and in other respects as well. Men holding these views also observe that the weaker or low-status segments of the system are those characteristically associated with and used by students from working and lower middle-class origins, so that the status differentiation in higher education is closely linked to that of the class structure as a whole. They argue that any sectors of education outside the system that includes the universities must necessarily be made up of second-class institutions for second-class (and most commonly working class) citizens, as historically they have been. Essentially their slogan is "nothing if not the best"– especially for youngsters from those strata of the society that have often gotten less or, if anything, second best.

But while this position is humane and generous in its concern for the equality of educational opportunities for working-class people, it is, in its insistence on a "leveling upward," in cost as well as quality, inevitably in conflict with a continued and rapid expansion of the provision for higher education. No society, no matter how rich, can afford a system of higher education for 20 or 30

percent of the age grade at the cost levels of the elite higher education that it formerly provided for 5 percent of the population. Insofar as egalitarians insist that there be no major differentials in per capita costs among various sectors of the system of higher education, and also insist on expansion, then they force a leveling downward in costs, and perhaps in quality as well. Insofar as they are committed to a high and common set of standards throughout the system, they are also necessarily urging a restraint on expansion, though they themselves may not recognize this. The crucial question in this "unitarian" position is whether it is a commitment only to a common set of standards throughout the system, or to a common *high* set of standards as well.

The "unitarian" position, I suggest, is basically incompatible with very marked differences between institutions in their status, staff-student ratios, and other aspects of cost and quality. While it is possible in principle to argue that some institutions would be more expensive because they carry a larger research responsibility, it is very difficult in practice to argue for a genuine unitarian system while forbidding certain parts of that system or institutions within it to engage in research. And research is inherently highly expensive. Moreover, there is a tendency everywhere to identify research with the highest standards of higher education, an identification that has a strong component of reality in it. It is research that attracts the most able and creative academic minds, and it is the institutions that recruit these men that gain higher status in any system of higher education. Therefore, a genuinely egalitarian policy must allow every institution to attract people who are innovative intellectually, and that means supporting their research and giving them the high degree of autonomy they need to create new knowledge, new fields of study, and new combinations of disciplines. These activities are very hard to rationalize and program closely despite the new forms of systems management being introduced everywhere. For this and other reasons, a unitarian position that wants to raise standards in all institutions to that of the leading universities, tends to constrain the growth of the system; if every new place, every new institution is potentially as expensive as the most costly of the old, then growth must be very carefully planned and sharply restricted. However, where the egalitarian spirit overrides that of a commitment to high stand-

ards, as in much of the United States, the slogan is not "nothing if not the best" but rather the expansionist slogan "something is better than nothing." Under those circumstances there tends to be a leveling downward coupled with expansion, rather than a leveling upward with its inherent tendencies toward a constraint on growth.

The key question in this dilemma is whether new forms of higher education can fulfill their functions at a standard that earns high status and satisfies egalitarians, while reducing per capita costs in ways that will allow genuine expansion toward mass higher education. The Open University in Great Britain is certainly one effort in that direction. Alternatively, a society may reject the arguments of the unitarians and egalitarians and develop a system that sustains internal diversity in costs and quality as well as in forms and functions, on the American model. (As I suggest later, this is much more difficult in systems that are financed, and thus ultimately governed, from a central government agency.) But in either case, the more ambitious and energetic the new institutions are, the more they will demand the libraries and research facilities, the salary schedules and the other amenities, of the old institutions, and the more likely they are to drive their per capita costs up. It may be worth exploring how the forms of this dilemma differ in different societies.

The effect of expansion on "standards" and "quality" is a complex and uncertain issue. In the early stages of the current phase of growth, in the 1950s, there was widespread concern among academic men and others that the pool of talented youth able to profit from higher education was small and limited, and that expansion beyond the numbers provided by this pool would necessarily mean a decline in student quality. But this fear has declined and in some cases disappeared as numbers have grown without a demonstrable decline in overall student quality.[9] Nevertheless, some observers suggest the new students are, if not less able, then less highly motivated, or less well prepared in their secondary schools, for serious academic work. This feeling is widespread, even if there is no good evidence to support the hypothesis, and some reason to suspect that real students in the present

[9]Though it appears that with larger numbers the *range* of student abilities is wider.

are being compared with idealized students in some mythical Golden Age located variously in the past, depending on the age of the speaker.

There is a somewhat more persistent and plausible concern held by many that the rapid expansion of higher education has lowered the average quality or the adequacy of preparation of college and university teachers, especially among the new recruits. Still others fear that growth has affected the relations between teachers and students adversely, making them more remote and impersonal (where they were not so already). And others suggest that mass higher education must affect the intellectual climate of colleges and universities, introducing into them the vulgarities of the marketplace, of vocational training, of mass politics and popular culture.

Whatever the validity of these fears, and they are not wholly without substance, it seems likely that the impact of expansion on the quality of higher education would be greatly influenced in every society by how it deals with the dilemmas discussed above, and particularly whether it strives to achieve a common level of quality throughout, or finds ways of creating and sustaining diversity within its system in all the characteristics that mark higher educational institutions, including their quality and costs. It may be that in the interaction of quality, equality, and expansion, educators must accept the inequalities inherent in genuine diversity if they are to defend the highest standards of scholarly and academic life in some parts of an expanding system. But that "solution," of course, has its own costs – moral and intellectual as well as financial and political – and some societies may well opt for equality at high standards at the cost of continued rapid expansion. But I suspect that only in rhetoric can all of these desirable characteristics of higher education be maximized within the same system.

Patterns of Planning under Conditions of Uncertainty and Rapid Change

An analysis of the phases of development of higher education of the kind we are undertaking in this paper involves some effort to see ahead into the future. And that, of course, raises the question of the extent to which some kind of planning, either for systems

or for single institutions, can help to ease the transitions and solve the problems during the transition phases uncovered by this analysis. That, in turn, involves some consideration of the nature of forecasting and the role that it may play in educational planning. Let me start by making a distinction between secular trends and unforeseen developments.

Secular Trends

Secular trends, the broad movements of social institutions of the kind that we have been discussing in this paper, can reasonably be expected to continue short of a catastrophe over a period of decades. Among the secular trends in higher education that we can reasonably expect to continue for the rest of the century the most important are growth, democratization, and diversification.

Growth

Despite the problems that the growth of higher education brings in its train and despite the arguments one hears from various quarters that the growth should be slowed or stopped, it seems to me very unlikely that any advanced industrial society can or will be able to stabilize the numbers going on to some form of higher education any time in the near future. And this is true for a number of reasons that I think will be compelling for any government or ministry.

1. There is almost certainly going to be a continued popular demand for an increase in the number of places in colleges and universities. Despite much loose talk about graduate unemployment or of an oversupply of educated men, it is still clear that people who have gone on to higher education thereby increase their chances for having more secure, more interesting, and better paid work throughout their lives. The concern of young men and women and of their parents for access to the best and most highly rewarding jobs in the society (rewarding in every sense) will insure that the demand for places continues high.

2. These rational calculations and anticipations initially affect those people (and their sons and daughters) who are, so to speak, at the margin of higher education, who would a few years earlier have ended their formal education on the completion of secondary schooling. But growth and the movement from elite to mass higher education itself creates a set of social and psychological

forces that tend to sustain it. As more and more people go to college or university, and as an even larger number become aware of it as a possible and reasonable aspiration for themselves and their children, higher education enters into the standard of living of growing sectors of the population. Sending one's sons and daughters to college or university increasingly becomes one of the decencies of life rather than an extraordinary privilege reserved for people of high status or extraordinary ability. Giving one's children a higher education begins to resemble the acquisition of an automobile or washing machine, one of the symbols of increasing affluence – and there can be little doubt that the populations of advanced industrial societies have the settled expectation of a rising standard of living. But in addition, sending one's sons and daughters to college or university is already, and will increasingly be, a symbol of rising social status. Not only does it give evidence of status mobility in the adult generation – in this respect resembling the purchase of a home in the country or an automobile – but it also lays the necessary foundation for the social mobility of a family across generations. Everywhere the numbers of people who have completed secondary education grows, and as more people complete secondary education, it will be more necessary for their sons and daughters to go on to higher education if they are to qualify for still higher status occupations. And this is increasingly the case as more and more occupations require a degree or other higher educational qualification for entry.

3. But of course the wishes of parents and youngsters to go on to higher education would be inhibited if there were no growth in the jobs that "require" postsecondary education. And on this score, there is presently much talk of an oversupply of graduates and of a decline in the market for people who have had further education. But I think there is little evidence for that oversupply, certainly over the next three or four decades. For closely related to the growth of demand for places, which might be called the *push* from the general population, there is the *pull* of the economy, marked particularly by the continued growth of the tertiary or service sector of the society. And this takes two forms. One is the growth of those occupations that traditionally or presently "require" higher educational qualifications. The growth of every advanced economy is marked by a much more rapid growth in

the numbers of managerial and technical personnel than of manual or skilled workers. The rationalization of production and the growth of industrial and commercial organizations generate enormous bureaucratic structures that in their middle and higher reaches clearly call for the skills and attitudes and orientations that are provided by postsecondary education. Moreover, there is a whole range of new professions and semiprofessions, particularly those linked to the welfare functions of government – the social workers, penologists, experts in the environment, transport, housing and urban problems – that call for advanced training.

But in addition, and equally important, is the educational inflation of occupations. As the supply of educated people grows, job requirements are redefined so that occupations that formerly were filled by secondary-school graduates are increasingly restricted to people with postsecondary education. But in fact, people with more formal education compete with growing success for those jobs with people who have less formal qualification. And once in those jobs, they tend to reshape them, by exercising responsibility, taking initiative, applying skill and imagination, in ways that the job may not have "required" when it was being filled by people with lower qualifications. This is an aspect of the impact of the extension of higher education on the occupational structure that manpower analysts almost never take into account, partly because until recently graduates have been going into traditional graduate occupations rather than redefining and reshaping jobs formerly filled by people who had not been to college or university. But one of the most important aspects of the movement from elite to mass higher education lies precisely in this transformation of jobs by people of greater education than formerly were employed in those jobs.

What mass higher education does is to break the old rigid connection between education and the occupational structure under which a degree not only *qualified* men for a certain range of occupations and professions, but also *disqualified* them for all the jobs that formerly did not employ graduates. Thus "graduate unemployment" has never meant that graduates could not get jobs competitively with nongraduates, but that they could not get the kind of jobs that they thought appropriate to their status and dignity. The growth of mass higher education breaks this con-

nection, and allows people who have gained a higher education to seek employment without loss of dignity wherever the jobs may exist. By entering the job market without prior conceptions of "inappropriate" jobs, graduates can up-grade the jobs that they do take, both in status and in the scope they give for the application of skill and initiative. At the same time, by competing with those who have not been through college or university they increase the pressures on the latter to gain formal qualifications so that they too can compete successfully for the same range of white-collar occupations. And that process (like the rising standards of living as applied to formal education) is one of the processes that inexorably increases the demand for higher education both from the populations of industrial societies and from their occupational structures.

4. Alongside these social, psychological, and economic forces are the institutional changes in secondary education that bring more and more students to the point of college or university entry. The raising of the school-leaving age, the broad extension of university preparatory studies, the spread of comprehensive schooling, are all institutional encouragements to students to stay on longer and to qualify for entry to college or university. The extension of educational opportunities in secondary education reflects both the fundamental democratization of modern society and also changes in the economy that I have spoken of. But it works independently of these other forces to increase the pool of young men and women "at the margin" of higher education, and thus inevitably the absolute numbers and the proportion of the age grade who are able to go on in response to a variety of other economic and social motivations.

It is widely recognized that the rate of social, economic and technological change in modern societies is very high and increasing. Inventions such as the computer, changes in the supply of energy implicit in nuclear fission and fusion, changes in forms of transportation and entertainment and communication all create new industries almost overnight while sentencing others to rapid decay and obsolescence. The more highly developed the economy, the more rapid these transformations of the economy and its underlying technological base, and all of this in turn forces changes throughout life on people in the labor force. One student

of social and technological change has estimated that a man who is presently entering the labor market in the United States will change not just his job but the industry in which he works nine or ten times in the course of his working life.

The rapidity of social change, largely though not exclusively due to rapid technological change, puts a very great premium on the ability to learn over the mastery of specific skills. This in turn greatly increases the functional importance of formal schooling over apprenticeship or on-the-job training. Formal education provides a base of broad understanding of managerial and technical principles, and above all a training in the capacity to acquire new knowledge, while apprenticeship and on-the-job training more often transmit skills that are likely to become obsolete very shortly. Rapid technological and organizational change loosen the links between formal education and specific parts of the occupational structure; but they increase the role of formal schooling in underpinning the whole structure of a rapidly changing technological system. This fact argues against the widespread assumption that "nontechnical" studies have no vocational component. On the contrary, it is likely that the most important "skill" acquired in higher education is the capacity to respond sensitively and successfully to rapid social and technological change. Above any specific skill acquired, this adaptability gives students in colleges and universities significant advantage over those who have not received any higher education. Indeed, it may well be that formal education is the major determinant of whether men and women are the beneficiaries or the victims of social and economic changes. It is clear that these changes benefit some sections of the population while hurting others, and those hurt most are those with inflexible skills who have not the capacity to adapt readily to new requirements or opportunities. It is not only the ability to adapt to new jobs but the capacity to learn where new opportunities are arising that is the mark of the educated man, and this is a very great advantage that he has over less well-educated people in contemporary societies.

Democratization

One secular trend in modern times – a movement that in Western countries is unbroken for at least two centuries and shows no signs

of weakening – is the fundamental democratization of society. In its earliest forms this involved the extension of the franchise and other aspects of political power to larger and larger sections of the society. In addition there has been a continued weakening of traditional social distinctions, and the extension of various social and economic rights (which were once privileges) to ever broader sections of the community. Traditional social hierarchies still survive, and patterns of deference are deeply imbedded in the social structures of many societies. Nevertheless, everywhere in the West they are weakening under the impact of World Wars, the growth of the consuming society, and the leveling forces of democratic politics, the mass media, and mass education. The movement toward mass higher education will contribute to this fundamental democratization of society, but also the democratization of society will feed back upon and contribute to the extension of educational opportunities. But the expansion and democratization of educational opportunity, the opening of doors, so to speak, is only part of this process. Sooner or later the argument is made that the ultimate results of a policy of equality of opportunity must be visible in the equality of achievement of social groups and strata. If intelligence is randomly distributed in a population– an empirical question that has come to be a political affirmation– then any differences in the proportions of youth from different social groups or strata who enter higher education and gain its degrees and certificates must be due to patterns of social discrimination and not to variations in individual ability. These differences in an egaliitarian age are increasingly defined as inequities and the product of injustice, and very strong social and political forces are at work to reduce or obliterate them. The net result of these forces must be the expansion of places, if the proportions from every social class are to be equalized. This is clearly more a long-range goal than any immediate achievable outcome of public policy; and moreover there are many arguments in principle against these policies. But whatever one may think of those arguments, it is difficult to imagine that they will be decisive, and that the fundamental democratization of the society will not also extend to the provision of places in higher education as it has for primary school and is in the process of doing at the secondary levels.

Diversification

Another broad trend in higher education that we might reasonably expect to continue is the diversification of the forms and functions of higher education. As I have suggested several times in this essay, the growth of numbers has also meant an increasing diversity of students in respect to their social origins and other characteristics, in their motivations, aspirations, interests, and adult careers. All of this places great pressures on the system to reflect the diversity of students in a similar diversity of educational provision – in the curriculum, in forms of instruction and the like. A central issue, as I have suggested, is the continuing struggle on the part of more traditionally oriented educations against the threat, as they see it, to standards, values, and indeed the very essence of the traditional university, posed by the pressures for diversification arising out of the growing and changing student population.

But in addition to the familiar changes within the "regular" colleges and universities, there is also a movement to diversify higher education upward and outward: upward to provide adult education or lifelong learning for a very large part of the adult population; outward, to bring it to people in their own homes or workplaces. The pressures behind this are many. There is obviously the force of rapid social and technological change, which alone creates a need for the provision of new skills or renewed formal training for people who are changing their occupations, or whose jobs and professions are changing more rapidly than their capacity to keep up through on-the-job experience. For example, engineers and doctors are increasingly out of touch with the latest developments in their professions unless they are able to get formal refresher training during their professional careers. But in addition many educators are noting that substantial sections of the old university student body, entering directly from secondary school, are for various reasons somewhat resentful of their prolonged formal education and rather weakly motivated. By contrast the motivation of adults already in the occupational structure for further formal education is often very high. They are much more rewarding to teach and indeed bring a new and stimulating element back into the classroom by way of their own job experience. Also, they tend to be less highly politicized

and have a more exclusively academic or vocational interest, and this appeals to many educators as well as to politicians. Add to this the fact that adult education, offered part-time or in the evenings for people already in the occupational structure, often turns out to be less expensive than traditional forms of higher education. The students do not have to be expensively maintained in halls of residence; moreover, there is not the hidden cost of their foregone earnings if they are actually at work while attending college or university courses. A great deal has been written on the subject of permanent education; I share the view of many that this may well be the most rapidly growing sector of higher education over the next three or four decades. And if adults are brought directly into the central college and university facilities and are taught alongside of young men and women directly out of secondary school, it may be enormously beneficial for both sides, and in important respects change the character of higher education for the older and younger groups alike.

But adult education, already liberated from the traditional forms associated with the education of young men and women, is likely to break with all sorts of traditional assumptions about how higher education is accomplished. It is likely to be more dispersed and brought much closer to where people live and work. Already the Open University in Britain has demonstrated that higher education at the high standard of British universities can be offered to men and women in their own homes, and this is a lesson that is being learned by similar forms of off-campus and "extended" education in the United States and other countries. The imaginative use of television, video cassettes, and remote computer consoles will greatly facilitate the provision of higher education outside the traditional boundaries of the university or college buildings. Although these developments are likely to occur first in connection with adult education, they may very well be adapted to the education of postsecondary youth in the near future.

Growth, democratization, diversification – these are the secular trends in higher education that we can anticipate continuing, though at different rates and in different forms in different places, over the next three or four decades. And if the future were the product of the secular trends alone we could plan for it with some

assurance, some sense of our capacity to master the future, first intellectually and then institutionally. But the future is not just the aggregate of secular trends. It is also full of unforeseen events and developments that sharply limit our power to anticipate the nature of the world for which we plan, or our capacity to make our plans achieve the results that we intend.

Unforeseen Developments

Unforeseen developments take a number of different forms. They take the form of new techniques and technologies in industries; they take the form of broad changes in the values of sections of the society and most especially of youth. Who could have forecast only two or three decades ago the development of the computer industry, or of electronics more generally? These industries have affected the economies and occupational structures of advanced industrial societies very considerably. And in a narrower perspective, they have greatly changed the resources available to education. Video cassettes, television, computers and the like make it possible at least to imagine extended forms of higher education very different from the correspondence courses of the "external degree" before World War II.

Specific historical events also affect our power to forecast the developments of institutions. The assassinations of John and Robert Kennedy profoundly changed the politics (and the colleges and universities) of the United States, not least through their effect on the extent and duration of American military involvement in Indo-China. The balance of payments crisis in Britain and its effect on the British National Plan in the late 1960s very substantially modified the development of higher education in that country. Or to take a more speculative example, a substantial easing of tensions between East and West, and very sharp control of the arms race, may in the future release substantial resources in Western countries for higher education that are now spent on defense.

There are also broad changes in values, in whole societies or in major segments, that affect higher education. For example, the quite unanticipated growth of concern for the environment in all industrial societies will affect higher education in various ways – on one hand, increasing the demand for people with broad com-

binations of advanced learning in social and technical areas; on the other hand, providing important additional competition for resources that might otherwise go to higher education. Another example is the growth of the "counterculture" in every Western society, and what is clearly a retreat from reason among sections of middle-class youth toward neo-romanticism and unconventional forms of religiosity. Closely related to this there is, among certain sections of youth, what might be called a crisis of ambition, marked by the primacy of moral considerations and a "quest for community" as over against the striving for individual achievement and a personal career. These changes in values, whose significance it is hard now to assess over the long run, may have very large consequences for institutions such as universities based so substantially on the rule of reason and on the preparation for adult careers based on knowledge and expertise. The heightened political concerns of university students in the late 1960s, and the readiness to carry political activism into the university itself, has posed another set of problems for institutions of higher education, and it is difficult to know how that pattern will develop in the decades ahead. In addition there are changes in the relations between the generations, in the strength and basis of authority, and in a whole variety of fundamental beliefs and values that make problematic the traditional forms of relationships in colleges and universities.

Forms of "Planning"

In the face of so much that is so problematic and fortuitous in historical development, as against what is reasonably anticipatable as the outcome of foreseeable secular change, it is useful to make a distinction between what might be called "prescriptive planning" and "systems planning."

Prescriptive planning, the kind that is most commonly practiced by the governing agencies and ministries of advanced societies, aims to spell out in detail the size and shape of the system of higher education over the next several decades, and the content and forms of instruction: in brief, what will be taught, to whom, to how many, and in what kind of institutions at what expense. Prescriptive planning necessarily rests on an analysis of secular trends (and only some of those). Typically, it bases itself on

estimates and projections of the demand for higher education, both by the population at large and by the economy, and the resources available to higher education over a period of years. Systems planning, by contrast, would have as its aim the evolution of a system of higher education marked by diversity and flexibility. It would not aim to specify in detail what those institutions of higher education will look like, or how and what they will teach to whom. The difference in these modes of "planning" is between planning the specific size, shape, and content of an educational system, and planning the structure or form of a system of higher education that is best able to respond to the *combination* of secular trends and unforeseen developments.

The forces for prescriptive planning are everywhere dominant, despite the fact that they are probably inappropriate for a future that inevitably involves unforeseen developments. They are dominant, first, because of the very existence of agencies of central control. The existence of a central state administrative apparatus with the power to plan prescriptively is the first guarantee that that will be the form that planning will take. There is, in addition, the illusion that higher education constitutes a closed system relatively impervious to unforeseen developments. This is a hangover from the period when almost the whole of education consisted of compulsory schooling plus a very small system of elite higher education; the bulk of "planning" for that kind of system was largely a planning for space and for the number of teachers necessary for a known population of youngsters. The forms and patterns of broad, nationwide prescriptive planning for primary and secondary education are now being adapted to higher education. Yet it is easy to see how much more vulnerable higher education is to unforeseen developments in technology, historical events, and broad changes in values than is the system of primary and secondary education. And third, growth itself stimulates prescriptive planning: the more higher education grows, the more money is needed for it, the more interest there is in it among larger parts of the population, the greater demand there is for tight control over its shape and costs. The growing demand for "accountability" of higher education, for its ability to demonstrate its efficiency in the achievement of mandated and budgeted goals, inevitably translates itself into tighter controls and prescriptive

planning. But this control can only be exercised rationally in terms of available knowledge, based on foreseeable trends and projections. The growth of higher education, given a prescriptive control system, places ever greater demands on that system to maintain and increase its control over numbers and costs, structures and standards.

But prescriptive planning involving that kind of close control has very little flexibility to respond to the unforeseen, and a very slow response rate to new developments. In addition it politcizes many educational issues by locating the key decisions in central political agencies. But perhaps most importantly, prescriptive planning by central planning agencies does not and perhaps cannot create genuine diversity in the forms and structures of higher education, although diversity itself constitutes the major resource that higher education has for responding to the unforeseen as well as to the anticipated developments and secular trends of modern society.

Central governing bodies tend to exert pressures toward uniformity among the institutions under their control. And these tendencies are only slowed rather than reversed by the formal allocation of different functions to different sectors, as they are, for example, in Britain's "binary" system. The pressures for uniformity or convergence associated with central governmental control over higher education, are several:

- The uniform application of administrative forms and principles, as in formulas linking support to enrollments; formulas governing building standards and the provision and allocation of space; formulas governing research support, etc.
- Broad norms of equity, which prescribe equal treatment for "equivalent" units under a single governing body;
- Increasingly strong egalitarian values, which define all differences among public institutions – in their functions, standards, and support – as inequitable.

Add to these the tendency for institutions to converge toward the forms and practices of the most prestigious models of higher education, a tendancy that operates independently of government

control, and we see that the forces working against diversity in higher education are very strong at a time when expansion increases the needs for diversification of forms and functions beyond what presently exists.

In many countries the struggle to contain diversity takes the form of an effort to maintain tight controls over standards, costs, functions, forms, and so forth, all in the service of the traditional values of higher education. Diversity is seen not only as a threat to the power of the state over a major claimant on public resources, as a threat to orderly governmental and bureaucratic process, as a challenge to the norms of equity and equality; diversity is also seen as academic anarchy and a threat to the traditional values of higher education itself. In part, there is in this a hostility to the market that is seen, correctly, as subversive of prescriptive controls, embodying the mastery of the unqualified over what ought to be a protected sphere of cultural life. Add to this the relation of growth to high costs and public accountability, and the consequent rationalization of administration in the service of efficiency, and we see how strong are the forces making for prescriptive planning. Everywhere one sees the distaste of central governmental agencies for the messiness and unpredictability of genuine and evolving diversity, and their continued efforts to bring their systems back under control and along desired lines of development. One may ask whether that tendency, which emerges more strongly during the confusions and uncertainties of transition from elite to mass higher education, is in fact likely to produce the kind of diverse system appropriate to mass higher education.

There are counter forces that help to sustain and even increase diversity in higher education (and these, of course, vary in strength in different countries). In some places there is a multiplicity of governmental bodies involved in higher education: the United States is an extreme case in this respect. More generally, there are variations in the degree of diversity of sources of support, both of public and private funds. Third, there is, among some politicians and educators, a growing recognition of the desirability of diversity of forms and functions in higher education, and this leads to efforts to create and defend these institutional

differences, through legislative and budgetary means.[10] In addition there is a growing sense of the inadequacy of the existing educational forms and a growing readiness to provide support for educational "innovations" on every level of higher education. Perhaps most important, rapid growth and large size make it more difficult for governing agencies to impose uniform patterns in systems already very large and diverse. The growth of institutions and systems toward mass higher education puts a strain on administrative structures designed for a smaller, simpler, elite system, and activities begin to elude the controls of an overburdened and understaffed administration. And finally, whether or not it is desirable, it is difficult to rationalize the multiplicity of functions and activities that go on within higher education. Much of what is done in higher education is esoteric and hard to understand for anyone outside a narrow academic or professional specialty. This near monopoly within the academic world of specialized knowledge about the nature of the academic fields and their needs and requirements is the ultimate basis of academic autonomy, and slows (though it may not prevent) rationalization and the application of standardized formulas governing admissions, academic standards, support, workloads, etc. (This is, of course, the more true where the knowledge base is greater and the intellectual authority of the academics concerned is higher – which is why academic autonomy is defended more successfully in elite institutions.)

The multiplicity of academic activities, and the specialized knowledge required to assess or evaluate them, interferes also with the flow of accurate and standardized information about what is going on in an institution to its top management, and even more to higher governmental agencies and authorities. The resulting areas of ignorance and obscurity make it more difficult to develop standardized procedures and formulas, and thus sustain diversities.

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[10]This effort to achieve diversity through prescriptive planning runs against the political forces of equality, the bureaucratic preferences for standardization, and the academic tendency of institutions to model themselves on the most prestigious. This is an intent of the "binary" policy in Britain. For a discussion of its recent problems, see the comments of its author, Anthony Crosland, in the *Times Higher Educational Supplement*, June 6, 1972.

Systems planning, by contrast, would aim to strengthen the forces making for diversity in higher education. It would, for example, increase the range and diversity of governing agencies and sources of support; it would encourage an increase in the range of functions performed and constituencies served by the system (though not necessarily by an individual institution); it would create forms of budgetary control in the service of "accountability" that did not impose the same formulas, standards, or criteria of "efficient performance" on all parts of the system. It would, in the terms of this essay, defend elite institutions in an emerging system of mass higher education without allowing the old elite institutions to impose their forms, standards, and costs on the new institutions or on the system as a whole.

But planning for a system marked by diversity runs against the habits and structures of educational planning in most European countries. Planning for diversity clearly involves risks, whereas prescriptive planning gives the illusion of meeting a contingent future more effectively (though I suspect the reverse is true). Prescriptive planning, and the central administrative and control structures that make it possible, are, I have suggested, the enemies of diversity, because diversity makes prescriptive planning and control more difficult and because it violates the principles of equitable treatment by government agencies and equality of status of public institutions. For these and other reasons, it it seems unlikely that those governmental agencies that have the responsibility for higher education can or will surrender their control.

Thus, on balance, I believe that the forces working against genuine diversity in higher education in most European countries are rather stronger than those working to sustain or increase it. This may be debatable, in which case it is an issue that deserves further comparative study. But if that assumption is true, then several questions deserve close attention.

1. Is increasing control over the forms and functions of higher education by central public agencies or authorities an inevitable concommitant of expansion and increased costs?

2. Is the (increasing) role of public authorities presently a force working against diversity in higher education, in their functions and standards, their modes of governance, their forms of

instruction, their sources of support, and their relation to other institutions of society?

3. If so, are these "standardizing" tendencies inherent in central governmental control, or is it possible for central governing and financing agencies to function in ways that sustain and increase the diversity in higher education? If so, what governing and funding structures would have that effect, and what principles of operation would govern their activities? How can efforts to support diversity be sustained against the political pressures in almost all advanced industrial societies arising out of (a) the norms that prescribe equitable treatment of all comparable units and (b) growing egalitarian sentiments and policies?

Conclusion

It is, needless to say, impossible to say anything very specific that is broadly true of all the emerging forms of higher education in 15 or 20 complex industrial societies. Therefore, to say anything that might be useful, or at least interesting, it is necessary to carry on the discussion at a somewhat higher level of abstraction. But this means, as I have suggested earlier, that my remarks cannot be true in detail for any institution or even any single national system.

Moreover, this paper is not intended to increase or disseminate knowledge, in the way, for example, that a statistical report or a comparative survey of some emerging educational patterns does. It is rather an effort to suggest a way of thinking about the development of higher education in advanced societies, and to provide a way of framing a set of interrelated questions about this development. Many of my apparently confident assertions will be challenged, and some may in fact be empirically wrong, at least in some places. But that is less important than whether the questions thus raised, the problems and issues thus identified, are in fact the problems, issues, and dilemmas of higher education that educators and politicians, students and citizens, face in societies whose systems of higher education are moving from elite to mass forms. My aim was to help identify and clarify those questions, not to answer them. In keeping with my evident bias in favor of diversity, I can only hope that even if the questions that higher education in advanced societies face are similar, their answers will be different.

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